In the claims:

1. (Previously presented) A band pass filter formed on an integrated circuit (IC) chip, said

band pass filter comprising:

a transformer capable of receiving an input signal and providing high pass filtering, said

transformer comprising at least a pair of metallic spirals formed on the IC chip; and

a capacitor capable of receiving said input signal and providing low pass filtering in

conjunction with an inductance of the transformer,

wherein said band pass filter provides band pass filtering through cascading said high

pass and low pass filtering.

2. (Previously presented) The band pass filter of claim 1, further comprising a plurality of

band pass filter stages, each band pass filter stage comprising a capacitor and a transformer

comprising a pair of metallic spirals formed on the IC chip, wherein said band pass filter stages

are cascaded to form the band pass filter.

3. (Previously presented) The band pass filter of claim 1, wherein said metallic spirals

comprise copper spirals.

4. (Previously presented) The band pass filter of claim 1, wherein the transformer comprises

a pair of transformers arrayed in series, wherein each transformer comprises a pair of metallic

spirals.

5. (Previously presented) The band pass filter of claim 1, wherein the metallic spirals are co-

planer and have been inter-wound to form the transformer on the IC chip.

6. (Previously presented) The band pass filter of claim 1, wherein the metallic spirals are

stacked, one on top of the other, to form the transformer on the IC chip.

7. (Previously presented) The band pass filter of claim 6, wherein the metallic spirals are

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separated by a dielectric material disposed therebetween.

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- 8. (Previously presented) The band pass filter of claim 7, wherein the dielectric material comprises silicon dioxide.
- 9. (Currently amended) The band pass filter of claim 1, wherein communication circuitry is formed on the same IC chip as the transformer [d] and the capacitor.
- 10. (Previously presented) The band pass filter of claim 1, wherein a transformation ratio of the transformer is between approximately 1:1 and approximately 1:2.
- 11. (Previously presented) The band pass filter of claim 1, wherein the IC chip comprises a silicon substrate.
- 12. (Previously presented) The band pass filter of claim 1, wherein the metallic spirals have a substantially rectangular or square overall shape.
- 13. (Previously presented) A communication system-on-chip (SOC) comprising communication circuitry and a band pass filter formed on an integrated circuit (IC) chip, said band pass filter comprising: a transformer capable of receiving an input signal and providing high pass filtering, said transformer comprising at least a pair of metallic spirals formed on the IC chip; and a capacitor capable of receiving said input signal and providing low pass filtering in conjunction with an inductance of the transformer, wherein said band pass filter provides band pass filtering through cascading said high pass and low pass filtering.
- 14. (Previously presented) The communication SOC of claim 13, wherein the band pass filter further comprises a plurality of band pass filter stages, each band pass filter stage comprising a capacitor and a transformer comprising a pair of metallic spirals formed on the IC chip, wherein said band pass filter stages are cascaded to form the band pass filter.
- 15. (Previously presented) The communication SOC of claim 13, wherein said metallic spirals

comprise copper spirals.

16. (Previously presented) The communication SOC of claim 13, wherein the transformer

comprises a pair of transformers arrayed in series, wherein each transformer comprises a pair of

metallic spirals.

17. (Previously presented) The communication SOC of claim 13, wherein the metallic spirals

are co-planer and have been inter-wound to form the transformer on the IC chip.

18. (Previously presented) The communication SOC of claim 13, wherein the metallic spirals

are stacked, one on top of the other, to form the transformer on the IC chip.

19. (Previously presented) The communication SOC of claim 18, wherein the metallic spirals

are separated by a dielectric material disposed therebetween.

20. (Previously presented) The communication SOC of claim 19, wherein the dielectric

material comprises silicon dioxide.

The communication SOC of claim 13, wherein a transformation 21. (Previously presented)

ratio of the transformer is between approximately 1:1 and approximately 1:2.

22-30. (Cancelled)

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